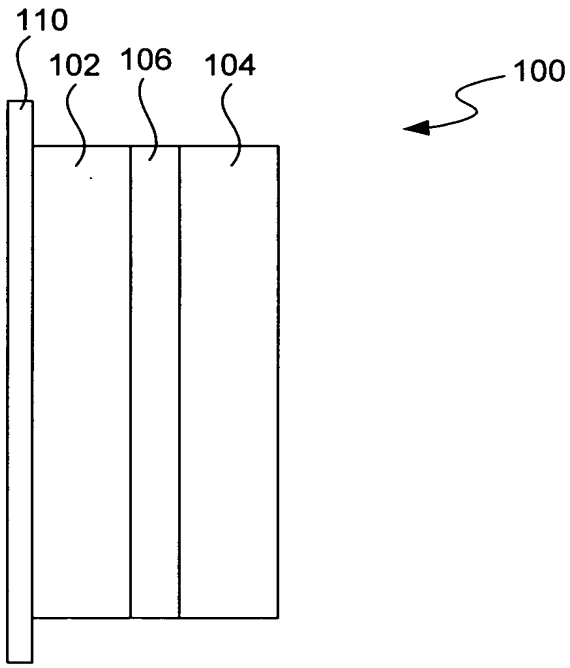

FIG. 1

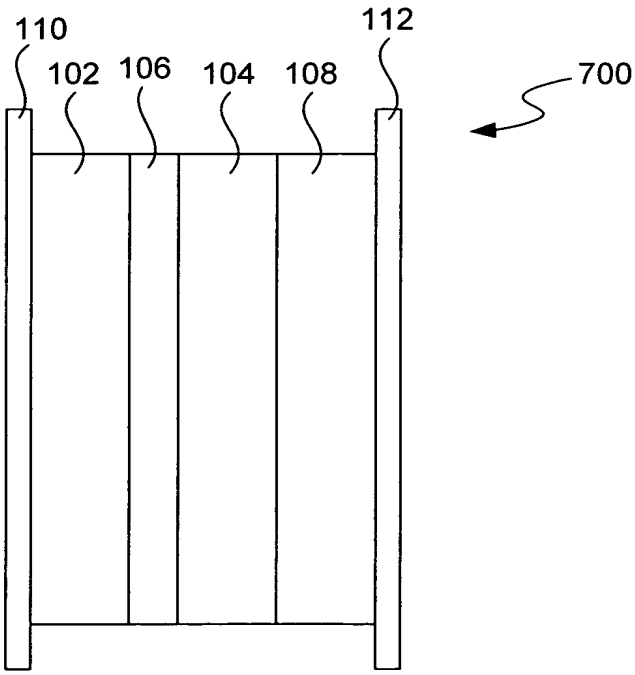

FIG. 7

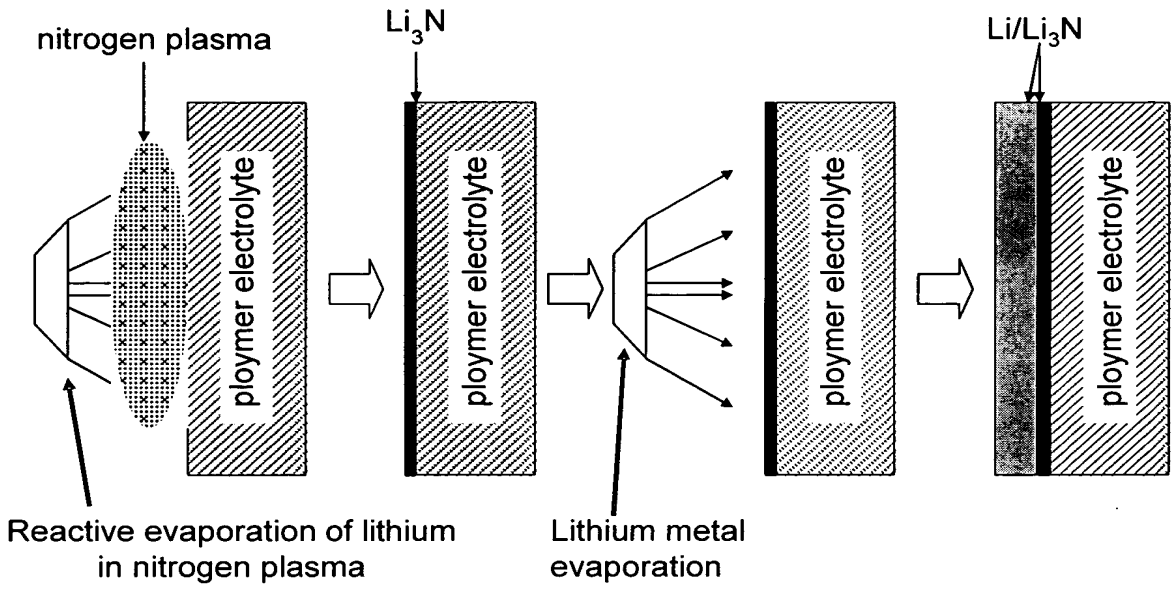
nitrogen plasma
Li_3N
Li/Li_3N
ploymer electrolyte
ploymer electrolyte
ploymer electrolyte
ploymer electrolyte
Reactive evaporation of lithium in nitrogen plasma
Lithium metal evaporation

FIG. 2

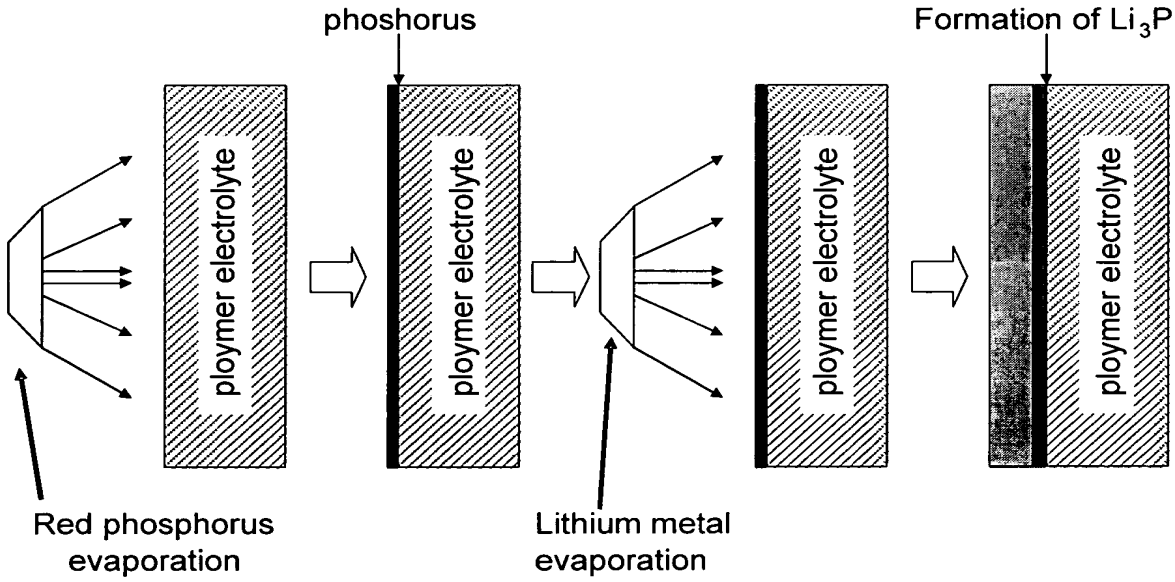
phoshorus
Formation of Li_3P
ploymer electrolyte
ploymer electrolyte
ploymer electrolyte
ploymer electrolyte
Red phosphorus evaporation
Lithium metal evaporation

FIG. 3

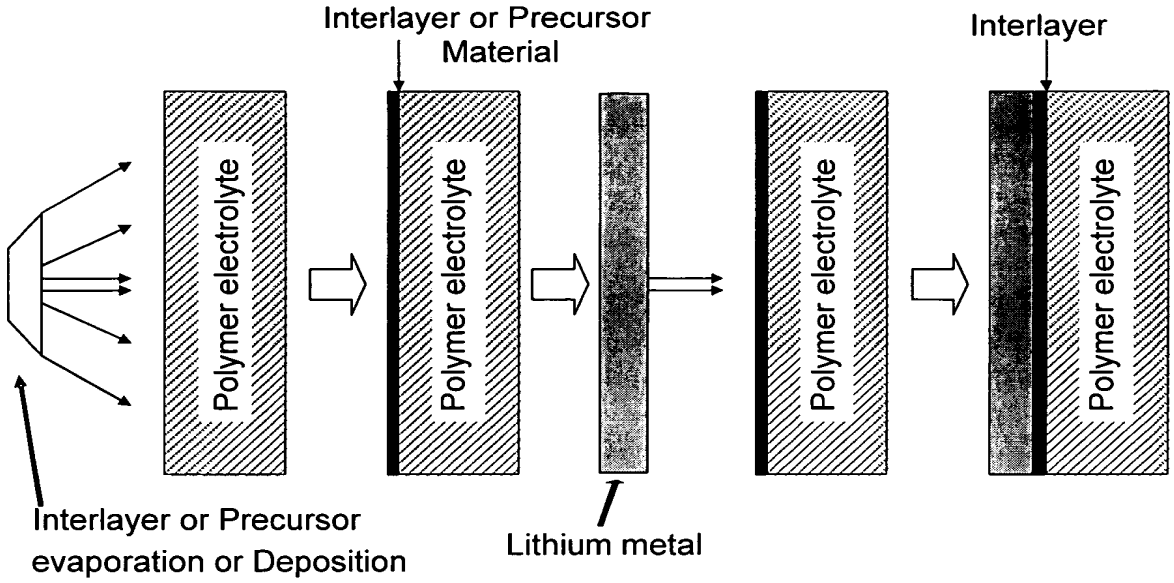
Interlayer or Precursor
Material
Interlayer
Polymer electrolyte
Polymer electrolyte
Polymer electrolyte
Polymer electrolyte
Interlayer or Precursor
evaporation or Deposition
Lithium metal

FIG. 4

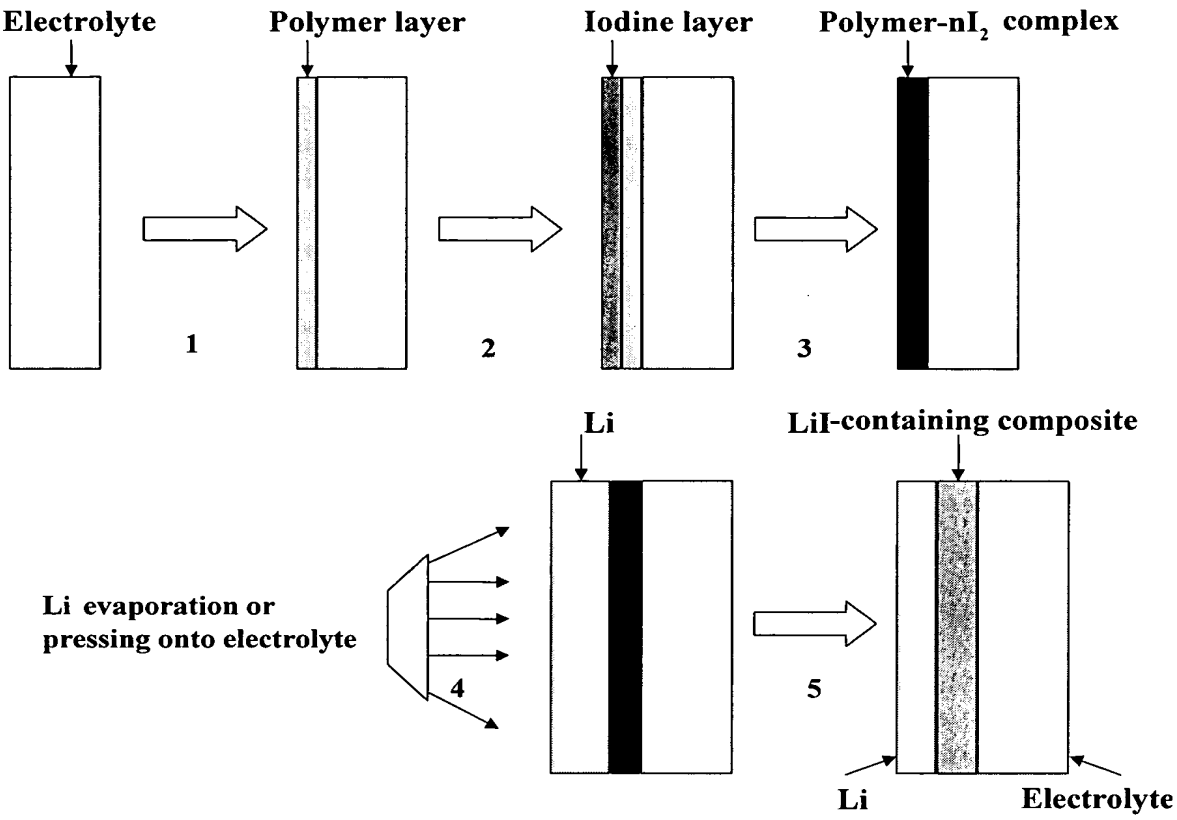
Electrolyte
Polymer layer
Iodine layer
Polymer-nI2 complex
1
2
3
Li
LiI-containing composite
Li evaporation or
pressing onto electrolyte
4
5
Li
Electrolyte

FIG. 5

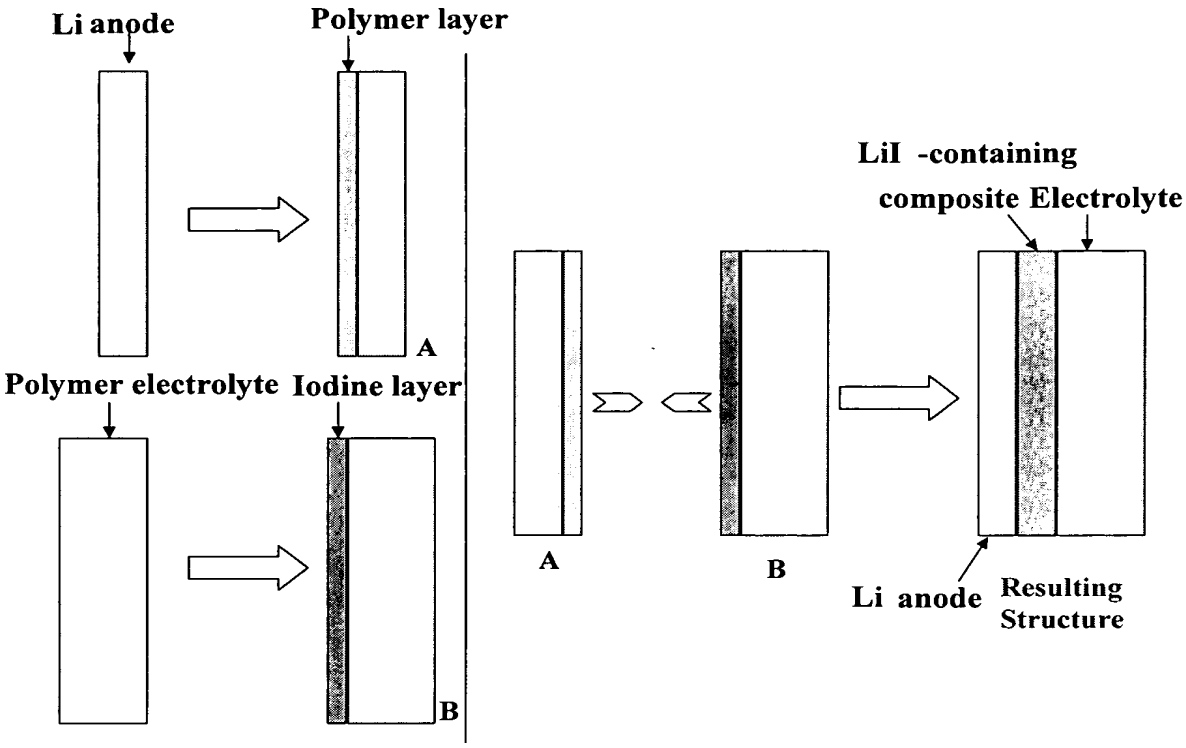
Li anode
Polymer layer
A
Polymer electrolyte
Iodine layer
B
A
B
LiI -containing
composite Electrolyte
Li anode
Resulting
Structure

FIG. 6